

I. AMENDMENT

Amendments to the Claims:

The following listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently amended) An isolated antibody or portion thereof capable of specifically binding to at least one epitope of a heparanase protein, said heparanase protein comprising being at least 60% homologous to the amino acid sequence of any of SEQ ID NOs:1-5 and 11, and a drug or imageable molecule linked to said antibody.

2-8. (canceled)

9. (Currently amended) The isolated antibody or portion thereof of claim 1, wherein said at least one epitope comprises an amino acid sequence as set forth in any of SEQ ID NOs: 6-10.

10. (Currently amended) The isolated antibody or portion thereof of claim 1 comprising a polyclonal antibody.

11. (Currently amended) The isolated antibody or portion thereof of claim 10 wherein said polyclonal antibody is selected from the group consisting of a crude polyclonal antibody and an affinity purified polyclonal antibody.

12. (Currently amended) The isolated antibody or portion thereof of claim 1 comprising a chimeric antibody.

13. (Currently amended) The isolated antibody or portion thereof of claim 1 comprising a humanized antibody.

14. (Currently amended) The isolated antibody or portion thereof of claim 1 comprising an Fab fragment.
15. (Currently amended) The isolated antibody or portion thereof of claim 1 comprising a single chain antibody.
16. (Currently amended) The isolated antibody or portion thereof of claim 1 comprising an immobilized antibody.
17. (Currently amended) The isolated antibody or portion thereof of claim 1 comprising a labeled antibody.
18. (Currently amended) The isolated antibody or portion thereof of claim 1 comprising a monoclonal antibody.
19. (Currently amended) The isolated antibody or portion thereof of claim 1, wherein said at least one epitope is selected from the group consisting of a heparan-sulfate binding site flanking region, a catalytic proton donor site, a catalytic nucleophilic site, an active site and binding site linking region and a C-terminal sequence of heparanase P8 subunit.
20. (Currently amended) The isolated antibody or portion thereof of claim 1, wherein said heparanase protein is substantially free of contaminating proteins, as determined by an assay selected from the group consisting of immunodetection, gel electrophoresis and catalytic activity.
21. (Original) The isolated antibody of claim 1, wherein said heparanase protein is a recombinant heparanase protein.
22. (Original) A hybridoma cell line for producing a monoclonal antibody, comprising a cell line for producing the monoclonal antibody of claim 18.
23. (canceled)

24. (Currently amended) An isolated antibody or portion thereof elicited by at least one epitope of a heparanase protein, said heparanase protein being at least 60% homologous to the amino acid sequence of comprising any of SEQ ID NOs:1-5 and 11, and a drug or imageable molecule linked to said antibody.

25-31. (canceled)

32. (Currently amended) The isolated antibody or portion thereof of claim 24, wherein said at least one epitope comprises an amino acid sequence as set forth in any of SEQ ID NOs: 6-10.

33-141. (canceled)

142. (Currently amended) A pharmaceutical composition comprising the isolated anti-heparanase antibody or portion thereof of claim 1 and a pharmaceutically acceptable carrier.

143-145. (canceled)

146. (Currently amended) The pharmaceutical composition of claim 142, wherein said anti-heparanase antibody or portion thereof is capable of binding to at least one epitope comprising a sequence as set forth in any of SEQ ID NOs: 1-5 and 11.

147-150. (canceled)

151. (Currently amended) The pharmaceutical composition of claim 142, wherein said anti-heparanase antibody or portion thereof is capable of binding to at least one epitope comprising a sequence as set forth in any of SEQ ID NOs:6-10.

152. (Currently amended) The pharmaceutical composition of claim 142, wherein said isolated anti-heparanase antibody or portion thereof is a monoclonal antibody.

153. (Currently amended) The ~~method~~ pharmaceutical composition of claim 142, wherein said anti-heparanase antibody is a humanized antibody.

154. (Original) The pharmaceutical composition of claim 152, wherein said monoclonal antibody is selected from the group consisting of HP130, HP 239, HP 108.264, HP 115.140, HP 152.197, HP 110.662, HP 144.141, HP 108.371, HP 135.108, HP 151.316, HP 117.372, HP 37/33, HP3/17, HP 201 and HP 102.

155-171. (canceled)

Please add the following claims:

172. (New) The isolated antibody of claim 18, wherein said monoclonal antibody is selected from the group consisting of HP130, HP 239, HP 108.264, HP 115.140, HP 152.197, HP 110.662, HP 144.141, HP 108.371, HP 135.108, HP 151.316, HP 117.372, HP 37/33, HP3/17, HP 201 and HP 102.

173. (New) The isolated antibody of claim 1, wherein said linkage is direct.

174. (New) The isolated antibody of claim 1, wherein said linkage is indirect.

175. (New) The isolated antibody of claim 174, wherein said indirect linkage is via a liposome.

176. (New) The isolated antibody of claim 1, which is linked to a drug.

177. (New) The isolated antibody of claim 176, wherein said drug is anti-cancerous.

178. (New) The isolated antibody of claim 177, wherein said anti-cancerous drug is a radio isotope.

179. (New) The isolated antibody of claim 1, which is linked to an imageable molecule.

180. (New) The isolated molecule of claim 179, wherein said imageable molecule is a radio isotope.
181. (New) The isolated molecule of claim 179, wherein said imageable molecule is endoscopically imageable.
182. (New) The isolated molecule of claim 179, wherein said imageable molecule is laparoscopically imageable.
183. (New) The isolated molecule of claim 179, wherein said imageable molecule is fluorescent.
184. (New) The isolated molecule of claim 179, wherein said imageable molecule is luminescent.
185. (New) The isolated antibody of claim 24, wherein said linkage is direct.
186. (New) The isolated antibody of claim 24, wherein said linkage is indirect.
187. (New) The isolated antibody of claim 186, wherein said indirect linkage is via a liposome.
188. (New) The isolated antibody of claim 24, which is linked to a drug.
189. (New) The isolated antibody of claim 188, wherein said drug is anti-cancerous.
190. (New) The isolated antibody of claim 189, wherein said anti-cancerous drug is a radio isotope.
191. (New) The isolated antibody of claim 24, which is linked to an imageable molecule.

192. (New) The isolated molecule of claim 191, wherein said imageable molecule is a radio isotope.

192. (New) The isolated molecule of claim 191, wherein said imageable molecule is endoscopically imageable.

193. (New) The isolated molecule of claim 191, wherein said imageable molecule is laparoscopically imageable.

194. (New) The isolated molecule of claim 191, wherein said imageable molecule is fluorescent.

195. (New) The isolated molecule of claim 191, wherein said imageable molecule is luminescent.

196. (New) The isolated antibody of claim 13 comprising a fully humanized antibody.

197. (New) The pharmaceutical composition of claim 153, wherein said anti-heparanase antibody is a fully humanized antibody.